



## AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota (Article 33-15 of the North Dakota Administrative Code), and in reliance on statements and representations heretofore made by the owner designated below, a Permit to Construct is hereby issued authorizing such owner to construct and initially operate the source unit(s) at the location designated below. This Permit to Construct is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified below:

### I. General Information:

A. **Permit to Construct Number:** PTC14036

B. **Source:**

1. Name: Central Delivery Point Facility (O10002)
2. Location: Sec. 19, T150N, R95W  
McKenzie County, North Dakota
3. Source Type: Crude Oil Storage Tank
4. Equipment at the Facility:

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
<b>Existing Unchanged from PTO:</b>			
Heat medium heater rated at <10 MM Btu/hr and fired on natural gas	1	1	None
200 barrel fixed roof slop tank	5	5	Submerged fill pipe (SFP) & VRU
Emergency flare (40 feet)	15	15	None
Fugitive equipment leaks	FS1	FS1	None
Two 10,000 barrel internal floating roof crude oil storage tanks (2010, 2011) (Subpart Kb)	16, 17	16, 17	Internal floating roof (IFR) & SFP
Truck crude oil load out station	18	21	VCU
Two 10,000 barrel internal floating roof crude oil storage tanks (2011) (Subpart Kb)	19, 20	19, 20	IFR & SFP
Vapor combustion unit (VCU) (40 feet)	21	21	None
<b>Existing Control Equipment Removed:</b>			

<b>Emission Unit Description</b>	<b>Emission Unit (EU)</b>	<b>Emission Point (EP)</b>	<b>Air Pollution Control Equipment</b>
Two 400 barrel fixed roof condensate/water tanks	2, 3	2, 3	SFP, (VRU to be removed)
500 barrel fixed roof condensate/water tank	4	4	SFP, (VRU to be removed)
<b>Existing Renamed:</b>			
Two 400 barrel produced water tanks	2, 3	2, 3	SFP
500 barrel gun barrel tank	4	4	SFP
Eight 1,000 barrel fixed roof crude oil/condensate tanks (2009) (Subpart Kb)	7-14	7-14	SFP & VRU
<b>New Equipment:</b>			
240,000 barrel internal floating roof crude oil storage tank (2014) (Subpart Kb)	22	22	SFP & IFR
750 barrel gun barrel fixed roof tank	23	23	SFP
Two 400 barrel produced water tanks	24, 25	24, 25	SFP
210 barrel crude oil slop tank	26	26	SFP & VRU
Cummins Model QSK50-G4 diesel engine driven emergency generator rated at 2,220 bhp (manufactured in December 2010)	27	27	None

The table below includes all units expected to be located at the facility:

<b>Emission Unit Description</b>	<b>Emission Unit (EU)</b>	<b>Emission Point (EP)</b>	<b>Air Pollution Control Equipment</b>
Heat medium heater rated at <10 MMBtu/hr and fired on natural gas	1	1	None
Two 400 barrel produced water tanks	2, 3	2, 3	SFP
500 barrel gun barrel tank	4	4	SFP
200 barrel fixed roof slop tank	5	5	Submerged fill pipe (SFP) & VRU
Eight 1,000 barrel fixed roof crude oil/condensate tanks (2009) (Subpart Kb)	7-14	7-14	SFP & VRU
Emergency flare (40 feet)	15	15	None
Fugitive equipment leaks	FS1	FS1	None
Two 10,000 barrel internal floating roof crude oil storage tanks (2010, 2011) (Subpart Kb)	16, 17	16, 17	Internal floating roof (IFR) & SFP
Truck crude oil load out station	18	21	VCU
Two 10,000 barrel internal floating roof crude oil storage tanks (2011) (Subpart Kb)	19, 20	19, 20	IFR & SFP
Vapor combustion unit (VCU) (40 feet)	21	21	None
240,000 barrel internal floating roof crude oil storage tank (2014) (Subpart Kb)	22	22	SFP & IFR
750 barrel gun barrel fixed roof tank	23	23	SFP
Two 400 barrel produced water tanks	24, 25	24, 25	SFP
210 barrel crude oil slop tank	26	26	SFP & VRU
Cummins Model QSK50-G4 diesel engine driven emergency generator rated at 2,220 bhp (manufactured in December 2010)	27	27	None

**C. Owner/Operator (Permit Applicant):**

1. Name: Arrow Midstream Holdings, LLC
2. Address: 801 Cherry Street, Ste 3800  
Fort Worth, TX 76102
3. Application Date: May 16, 2014

**II. Conditions:** This Permit to Construct allows the construction and initial operation of the above-mentioned new or modified equipment at the source. The source may be operated under this Permit to Construct until a Permit to Operate is issued unless this permit is suspended or revoked. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect of the North Dakota Department of Health and to the conditions specified below.

**A. Emission Limits:** Emission limits from the operation of the source unit(s) identified in Item I.B of this Permit to Construct (hereafter referred to as "permit") are as follows. Source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Emission Unit Description	EU	EP	Pollutant / Parameter	Emission Limit
Cummins emergency generator rated at 2,220 bhp**	27	27	Opacity	20% (40%*)

\*Permissible for not more than one six-minute period per hour.

\*\*The potential to emit for an emergency generator is based on operating no more than 500 hours per year.

**B. Product Throughput Limits:** The amounts of total crude oil or crude oil condensate and produced water shall not exceed the following throughput totals per 12-month rolling total.

Product to be Limited	PTC Limit (bbl/yr on a 12-month rolling total)	PTC Limit (gal/yr on a 12-month rolling total)
Crude Oil	87,600,000	3,679,200,000
Condensate	730,000	30,660,000
Produced Water	7,300,000	306,600,000

**C. New Source Performance Standards (NSPS) for Storage Tank(s):** The owner/operator shall operate the storage tanks in accordance with the following applicable requirement(s):

- 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for

which Construction, Reconstruction or Modification Commenced after July 23, 1984, as incorporated by reference into NDAC Chapter 33-15-12.

- D. **40 CFR 60, Subpart OOOO:** The owner/operator shall comply with all applicable requirements of 40 CFR 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. EPA Region 8, not the North Dakota Department of Health, is the implementing and enforcement authority for these regulations. All required documentation must be submitted to EPA Region 8 at the following address:

U.S. EPA Region 8  
1595 Wynkoop Street  
Mail Code 8ENF – AT  
Denver, CO 80202-1129

- E. **40 CFR 60, Subpart IIII:** The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

- F. **Storage Tanks:** All tanks shall be equipped with a submerged fill pipe in accordance with NDAC 33-15-07-01.3.

- G. **Fuel Restriction:** The heat medium heater (EU 1) is restricted to combusting only natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet. The emergency generator (EU 27) is restricted to combusting only distillate oil containing no more than 0.0015 percent sulfur by weight.

- H. **Construction:** Construction of the above described facility shall be in accordance with information provided in the permit application as well as any plans, specifications and supporting data submitted to the Department. The Department shall be notified ten days in advance of any significant deviations from the specifications furnished. The issuance of this Permit to Construct may be suspended or revoked if the Department determines that a significant deviation from the plans and specifications furnished has been or is to be made.

Any violation of a condition issued as part of this permit to construct as well as any construction which proceeds in variance with any information submitted in the application, is regarded as a violation of construction authority and is subject to enforcement action.

- I. **Startup Notice:** A notification of the actual date of initial startup shall be submitted to the Department within 15 days after the date of initial startup.

- J. **Odor Restrictions:** The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16.

The owner/operator shall not discharge into the ambient air hydrogen sulfide (H<sub>2</sub>S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33-15-16-04 constitute a violation.

- K. **Organic Compounds Emissions:** The facility shall comply with the applicable requirements of NDAC 33-15-07, Control of Organic Compounds Emissions.
- L. **Permit Invalidation:** This permit shall become invalid if construction is not commenced within eighteen months after issuance of such permit, if construction is discontinued for a period of eighteen months or more; or if construction is not completed within a reasonable time.
- M. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.
- N. **Annual Emission Inventory/Annual Production Reports:** The owner/operator shall submit an annual emission inventory report or an annual production report, upon request, on forms supplied or approved by the Department.
- O. **Source Operations:** Operations at the installation shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.
- P. **Alterations, Modifications or Changes:** Any alteration, repairing, expansion, or change in the method of operation of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, repairing, expansion or change in the method of operation.
- Q. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33-15-08-01 – Internal Combustion Engine Emissions Restricted.
- R. **Recordkeeping:** The owner/operator shall maintain any compliance monitoring records required by this permit or applicable requirements. The owner/operator shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement,

report or application. Support information may include all calibration and maintenance records and all original strip-chart recordings/computer printouts for continuous monitoring instrumentation, and copies of all reports required by the permit.

- S. **Nuisance or Danger:** This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.
- T. **Malfunction Notification:** The owner/operator shall notify the Department of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations.
- U. **Operation of Air Pollution Control Equipment:** The owner/operator shall maintain and operate all air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- V. **Transfer of Permit to Construct:** The holder of a permit to construct may not transfer such permit without prior approval from the Department.
- W. **Right of Entry:** Any duly authorized officer, employee, or agent of the North Dakota Department of Health may enter and inspect any property, premise or place at which the source listed in Item I.B of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.
- X. **Other Regulations:** The owner/operator of the source unit(s) described in Item I.B of this permit shall comply with all State and Federal environmental laws and rules. In addition, the owner/operator shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.
- Y. **Permit Issuance:** This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. Notwithstanding the tentative nature of this information, the conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.
- Z. **Sampling and Testing:** The Department may require the owner/operator to conduct tests to determine the emission rate of air contaminants from the source.

The Department may observe the testing and may specify testing methods to be used. A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests and to facilitate reporting the test results to the Department, the owner/operator shall follow the procedures and formats in the Department's Emission Testing Guideline.

FOR THE NORTH DAKOTA  
DEPARTMENT OF HEALTH

Date \_\_\_\_\_

By \_\_\_\_\_  
Terry L. O'Clair, P.E.  
Director  
Division of Air Quality